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## Proper name-marking via 'liaison' in French

Pomino, Natascha ; Stark, Elisabeth

**Abstract:** The liaison consonant [z] in French noun phrases has traditionally been assumed to function as a plural marker. The realization of “plural [z]” in N(oun)-A(djective)-combinations is becoming, however, very rare in naturalistic data – except for contexts which allow a proper-name reading. On the one hand, one might think that we are dealing with a recent phenomenon, the beginning of a potential linguistic change in French in the sense of exaptation, reuse of former morphophonological material such as plural markers to signal proper-namehood in the sense of ‘frozen morphology’. If this turns out correct, we expect the productivity of the new synchronic function to increase: New NA-combinations which function as proper names should be realized systematically with liaison, and proper name-marking via liaison should also become possible with other liaison consonants. On the other hand, we may be dealing with a (completed) diachronic process, in that only those NA-combinations which allowed liaison at the relevant point in time may have a liaison consonant in their univerbated form. That is, new NA-combinations, even though they are used as proper names, do not display a liaison consonant, because liaison is no longer possible. The purpose of this paper was to investigate, based on empirical studies, whether liaison productively marks NA-combinations which function as proper names and distinguishes them from NA-combinations that count as common nouns, or whether we are dealing with a completed diachronic process. In view of the poor productivity observed, we argue that we are dealing with cases of univerbation.

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Natascha Pomino\* and Elisabeth Stark

# Proper name-marking via *liaison* in French

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**Abstract:** The *liaison* consonant [z] in French noun phrases has traditionally been assumed to function as a plural marker. The realization of “plural [z]” in N(oun)-A(djective)-combinations is becoming, however, very rare in naturalistic data – except for contexts which allow a proper-name reading. On the one hand, one might think that we are dealing with a recent phenomenon, the beginning of a potential linguistic change in French in the sense of *exaptation*, reuse of former morphophonological material such as plural markers to signal proper-namehood in the sense of ‘frozen morphology’. If this turns out correct, we expect the productivity of the new synchronic function to increase: New NA-combinations which function as proper names should be realized systematically with *liaison*, and proper name-marking via *liaison* should also become possible with other *liaison* consonants. On the other hand, we may be dealing with a (completed) diachronic process, in that only those NA-combinations which allowed *liaison* at the relevant point in time may have a *liaison* consonant in their univerbated form. That is, new NA-combinations, even though they are used as proper names, do not display a *liaison* consonant, because *liaison* is no longer possible. The purpose of this paper was to investigate, based on empirical studies, whether *liaison* productively marks NA-combinations which function as proper names and distinguishes them from NA-combinations that count as common nouns, or whether we are dealing with a completed diachronic process. In view of the poor productivity observed, we argue that we are dealing with cases of univerbation.

**Keywords:** *Liaison*, plural inflection, proper names, French, adjective position, univerbation

## 1 Introduction

Starting from the observation that the realization of the *liaison* consonant [z], traditionally analyzed as the morphological exponent of plural, in French NA- vs. AN-combinations is unevenly distributed, to say the least, we analyzed corpus

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data in a first step, from the corpus *Phonologie du français contemporain* (<http://www.projet-pfc.net/moteur.html>), and a corpus established in the context of the project *Stimmen der Schweiz* ‘Voices of Switzerland’ (<http://www.stimmen.uzh.ch/>; cf. Pomino and Stark 2016: 143–156). In the NA-combinations, we remarked a strong tendency for non-realization of *liaison*. The rare, but attested and even systematic realizations of “plural” [z] in NA-combinations showed a high degree of “lexicalization”, with proper-name-like expressions such as *Champs Elysées*. This led Pomino and Stark (2016) to formulate the strong hypothesis according to which *liaison* consonants in NA-combinations should be seen as ‘proper-name markers’, assuming exaptation, i.e. the reuse of functionless former morphological material, in order to set non-compositional (especially ‘proper-name-like’) combinations formally apart from fully compositional NA-combinations. This is in line with other studies that have observed a tendency in languages to distinguish proper names also on their form-side from common nouns by using any formal possibility available (e.g. Nübling 2005: 28, Handschuh 2017; see also Matushansky 2008: 605–606 for English). If this first hypothesis (H I) turned out to be correct, we predict that we should find:

- productive *liaison* in ‘invented’ proper-name like NA-combinations;
- the realization of *liaison* consonants in singular NA-combinations (e.g. [n], [t], [ʁ]), which are instances of impossible or ‘forbidden’ *liaison* according to the literature in fully compositional NA-combinations.

Both predictions can only be tested in an experimental setting (=reading task of NA-combinations forming ‘minimal pairs’, with a context-induced proper-name vs. compositional interpretation), which we did in two different test settings. We did find some surprising *liaison* realizations in singular NA-combinations, which might have been triggered by a ‘proper-name reading’ of the test items in one of our studies. Yet, a second study showed that the productivity of *liaison*-[z] was not as high as expected and, additionally, that other *liaison* consonants were not used in our ‘invented’ proper names, i.e. they are not productive at all. This led us to consider a second hypothesis (H II) based on which we do not expect a productive element: univerbation. Univerbation is understood as a diachronic process which combines two (or more, usually adjacent) words/lexical units into one new word/lexical unit. We assume that univerbation, in our case a completed process of ‘proprialization’, correlates somehow with the following three factors: (i) The boundaries between the two words/lexical units are blurred due to the *sandhi* phenomenon of *liaison*, (ii) the respective noun and adjective appear frequently adjacent to one another, and (iii) the combinations have a non-compositional semantics.

The paper is organized as follows: Section 2 gives a short overview of *liaison* realization in contemporary French with a focus on DP-internal *liaison* and the main findings of our corpus study (published in Pomino and Stark 2016). Section 3 addresses the possibility of formal marking of proper names in general and via *liaison* in French. This discussion ends with the formulation of two hypotheses, which we will test in Section 4. Section 4.1 describes the design of a first small pilot study comprising a reading task with invented proper-name-like NA-combinations. We found some surprising realizations of ‘forbidden’ *liaison* in this context, in singular NA-combinations (especially with *Mont*, ‘mountain’, as the first lexical unit). Against this background, we ran a second pilot study with systematic minimal pairs only in invented proper-name-like singular NA-combinations, presented briefly in Section 4.2, because it did not yield a single *liaison* realization. Section 5 presents a short discussion of the studies’ results, and Section 6 concludes the paper.

## 2 Basic facts about French *liaison*

### 2.1 The prenominal-postnominal asymmetry in French *liaison*

In the phonic realization of French, i.e. in the oral modality, the phenomenon of *liaison* is one of the most striking *sandhi* phenomena of this language. *Liaison* is understood here as the overt realisation of a latent word-final consonant in front of a following word-initial vowel (e.g. *petit ami* [p(ə)tit ami] ‘little (male) friend’) which (in a specific syntactic and/or prosodic context) is not pronounced before a following word-initial consonant (e.g. *petit garçon* [p(ə)ti gaʁsɔ̃] ‘little boy’) or when followed by a pause.<sup>1</sup> French has several latent consonants; the most frequent ones are [z, n, t], followed by [ʁ] and [p] (and sometimes also [k]): [z] > [n] > [t] > [ʁ] > [p] (ordered by frequency; cf. among others Durand and Lyche 2008, Green and Hintze 2001).<sup>2</sup> In a morphological perspective, only [z] can have a grammatical function, i.e. that of encoding the plural feature in the complex nominal in (1).

<sup>1</sup> See Côté (2011, chapter 3) for an overview of competing approaches to analyze the status of this *liaison* consonant.

<sup>2</sup> In other studies (e.g. Léon 1992), [t] is considered to be the second most frequent *liaison* consonant or equal to [n].

- (1) *Ce problème devra être résolu par de futur-s habitant-s de la ville.*  
DEM problem must be solved by DET future-PL inhabitant-PL of  
[d(ə) fytyʁ-z abitɑ̃]  
DET city DET future-PL inhabitant  
'This problem will have to be resolved by future inhabitants of the city.'

Yet, the above definition of *liaison* is only a first approximation to the phenomenon, because there is a host of other factors that is assumed to be relevant for triggering *liaison*. Table 1 gives a short survey of some of the most important factors that may impinge on *liaison*. As can be seen, previous studies have not

**Table 1:** Triggering factors of *liaison* (Delattre 1947, 1955, and 1966, Ågren 1973, Morin and Kaye 1982, Bybee 2001, Meinschaefer et al. 2015).

Factor	Impact
Syntactic context	Inside NPs: <i>Liaison</i> between prenominal elements and the noun is nearly categorical, whereas it tends to be avoided with postnominal elements.
Word length	<i>Liaison</i> is more frequent after monosyllabic/short words.
Lexical vs. function words	Function words show nearly categorical <i>liaison</i> ; at least, the degree of <i>liaison</i> is higher than with lexical words.
Word category	<i>Liaison</i> is more frequent after verbs than after nouns.
Lexical vs. grammatical [z]	If the latent consonant bears grammatical information (e.g. [z] for plural), <i>liaison</i> rates are higher than in cases where the latent consonant is part of the lexical material of an item (e.g. the [z] in <i>mois</i> 'month').
Phonetic context: preceding elements	A latent consonant preceded by a vowel is realized more often than one preceded by a consonant; and <i>liaison</i> is more frequent with one consonant preceding than with two or more.
Length of the following constituent	<i>Liaison</i> is more frequent before short constituents than before longer ones.
Frequency of co-occurrence of the components	<i>Liaison</i> is more frequent when the lexical items frequently co-occur (e.g. <i>premier étage</i> ) than in not so frequent co-occurrences (e.g. <i>singulier ami</i> ).
Frequency of the whole collocation	The higher the frequency of the collocation, the more likely <i>liaison</i> is.
Chunks	<i>Liaison</i> is categorical in some chunks (e.g. <i>accent aigu</i> ).
Sociolinguistic (and other language-external) factors	<i>Liaison</i> is more frequent in more standard-near sociolects and registers.

explicitly considered that proper names may differ from common nouns with respect to *liaison*.

Among these factors, the syntactic context is the most important for the following discussion and will thus be discussed in greater detail. Over the past decades, most researchers have emphasized that within a plural DP *liaison* is obligatory in the prenominal domain (e.g. *les amis* [lez ami] ‘the friends’). Conversely, *liaison* between a noun and a postnominal DP-internal element is classified in the standard literature as either optional in the case of a plural DP (e.g. *des maisons immenses* [de meʒɔ̃(z) imãs] ‘immense houses’) or as forbidden in the case of a singular DP (e.g. *une maison immense* [yn meʒɔ̃ imãs] ‘an immense house’) (cf. Delattre 1955 among others).

In a recent study that attempted to understand plural agreement within the French DP, Pomino and Stark (2016) showed, however, that there is a striking prenominal/postnominal asymmetry in *liaison* with plural-[z] in corpus data: *liaison* with [z] appears nearly exclusively in the prenominal domain, whereas it seldom occurs (with some exceptions, which we will discuss below) on the noun and on following DP-elements independently of plural or singular reference. These findings are based on corpus data from the *Phonologie du Français Contemporain*<sup>3</sup> (PFC, <http://www.projet-pfc.net/moteur.html>), which at the time of our study (October–December 2012) contained 1,857 items showing the combination NA or AN with potential *liaison* [z]. In all the results obtained, [z] can be associated with a plural, i.e. we are apparently dealing with *liaison* of a consonant bearing grammatical information. Out of the 1,857 items, 166 (=9%) items are with prenominal and 1,691 (=91%) with postnominal adjectives. Regardless of where the speakers come from, in the AN-combinations (N=166) 135 items (81.3%) show *liaison* with [z] between adjective and noun, while 31 items (18.7%) are without realized *liaison* (cf. Figure 1). These results show that there is a clear preference for marking plural-[z] in the prenominal context. For AN, the clear tendency to mark *liaison* is furthermore independent of the (elevated) register and recording situation: only 1 *liaison* of the AN-type occurs in the reading task (=elevated register), whereas 165 occur in informal conversations, i.e. the most natural communicative contexts. For the NA-combinations (N=1,691), we obtained quite the opposite result: 1,070 items (63.3%) are without realized *liaison* between the noun and the following adjective, and only 621 (36.7%) show *liaison*. In other words, there is a clear tendency in NA combinations not

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<sup>3</sup> The online version of the PFC corpus includes according to Durand et al. (2002, 2009) about 350 hours of spoken data from 396 speakers (born between 1910 and 1995) from about 36 different locations in France, Belgium, Switzerland, Quebec, Lebanon, Morocco and some other locations in Africa and the Antilles.

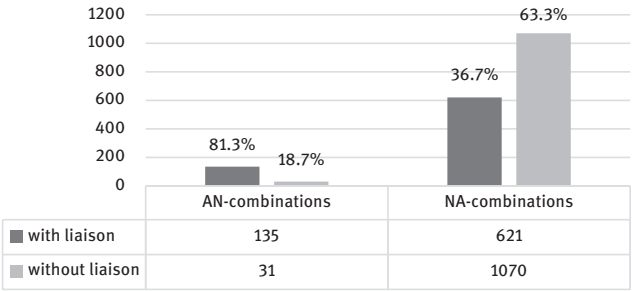


Figure 1: *Liaison* AN and NA (cf. Pomino and Stark 2016 for more details).

to mark plural-[z] via *liaison* on the noun (or as a prefix on the following adjective, depending on which analysis one prefers).

When we consider only the speakers of metropolitan France (see Figure 2), the tendency in NA combinations is, however, not that clear: Out of the 70 items with prenominal adjectives, 62 items (88.6%) show *liaison* with [z] between adjective and noun, while 8 items (11.4%) appear without realized *liaison*. Among the 921 NA-combinations, 531 items (57.7%) are without realized *liaison* between the noun and the following adjective, while 390 (42.3%) show *liaison*. Even though there is a slight preference for not realizing *liaison* in NA-combinations, at first glance, the diagram appears to reflect the pattern of optional *liaison*.

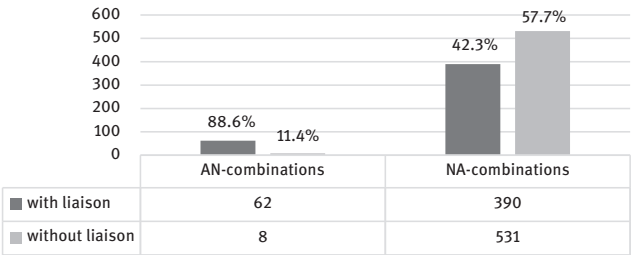


Figure 2: Absence vs. presence of *liaison* in AN/NA-combinations (metropolitan France only) in the PFC corpus.

Yet, the items stem (at least partially) from different recording situations: reading task vs. free and guided conversation.<sup>4</sup> If we leave the results of the reading

<sup>4</sup> Realized *liaison* varies considerably with respect to the recording situation. In free and guided conversation, we have a clear preference (82%) for not realizing *liaison*, while the presence of *liaison* increases considerably in the reading task. There are different reasons for this: First, different

task aside and focus exclusively on the results recorded during the guided and free conversation, we observe the already mentioned prenominal-postnominal asymmetry, i.e. a clear preference for realizing *liaison* between a prenominal A and N and a strong dispreference for realizing *liaison* between N and a post-nominal A (cf. Figure 3).

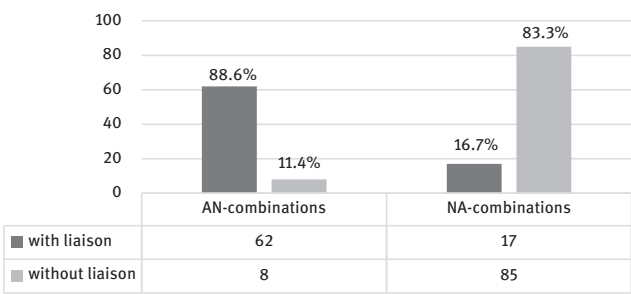


Figure 3: Results recorded during the guided and free conversation.<sup>5</sup>

We can thus conclude with Durand et al. (2011: 123) that, with respect to N(pl)+A, there is a strong difference between realization of *liaison* and its non-realization. The latter appears to be the default case. If this is true, we can put forward an even stronger claim: French nouns have lost the possibility to mark the plural via *liaison*-[z] (see the early claim by Mok 1966: 36).

## 2.2 What does [z] mark in NA-combinations?

If, as we have shown in Section 2.1, there is no systematic plural marking on the noun in the postnominal domain, what does [z] mark then in those cases where it still appears postnominally? Could it be that it has acquired a new function in contemporary French? What is evident in the PFC data is that the instances of

recording situations are associated with different language registers and, in the case at issue here, a higher register triggers more *liaison*. Second, the results of the reading task may be subject to the phenomenon of *spelling pronunciation* (i.e. a pronunciation which is based on spelling/orthography and does not reflect the standard or traditional pronunciation) (see already Levitt 1968 for the effect of spelling on pronunciation). That is, in the reading task the speaker sees the plural -s and this may influence its pronunciation in a *liaison* context, whereas the potential influence of spelling may be less relevant in a situation of free or guided conversation.

<sup>5</sup> Other corpus analyses have produced similar results: Ågren (1973) reports 27% (170/639) of realized liaison in NA-combinations, Malécot (1975) 18% (9/50), Ashby (1981) 11% (11/102), Smith (1996) 22% (68/309) and Ranson (2008) 13% (7/53).



*Jeux Olympiques de Berlin* stand out, as Figure 4 shows. Even within the reading task, it is the only item where we have a clear preference for *liaison* (cf. Durand et al. 2002: 103). Note that at the same time it is the only example where we deal with a proper name, a fact that has been overlooked in previous studies.<sup>6</sup> We will argue in Section 5 that it is most likely the proprial status of *Jeux Olympiques* that sets this NA-combination apart from the other ones.

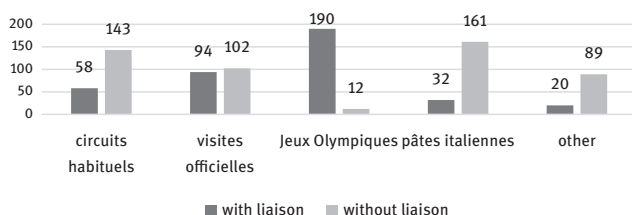


Figure 4: NA-combinations (reading task, metropolitan France only).<sup>7</sup>

It is a fact that “strongly lexicalized” French NA-combinations seem to have maintained the *liaison* [z] (cf. Ågren 1973: 124<sup>8</sup>, Klein 1982: 171–172, Bybee 2005: 27, Meinschaefer et al. 2015: 384). We tested this claim with an elicitation task which was one of the tasks administered in *Stimmen der Schweiz* ‘Voices of Switzerland’ (cf. <http://www.stimmen.uzh.ch/>), a linguistic project of the *Phonogrammarchiv* of the University of Zürich in four languages conducted in collaboration with the *Deutsches Seminar* and the *Romanisches Seminar* (cf. Pomino and Stark 2016 for more details). In this task, 114 participants recorded their reading aloud of 10 written examples, which contained a total of 37 possible contexts for *liaison*: 8 between two postnominal adjectives (AA, around 22%), 2

<sup>6</sup> From the examples in Figure 4, *Jeux Olympiques* is the only one where [z] appears in between two full vowels. We therefore tested in the *Stimmen der Schweiz* corpus whether the avoidance of a hiatus may influence the appearance of [z], but we could not find any evidence for this assumption.

<sup>7</sup> About 4/5 of all NA-items are constituted by *des circuits habituels* (22%), *des visites officielles* (22%), *Jeux Olympiques de Berlin* (22%) and *usine de pâtes italiennes* (22%). For reasons of representability, we will only consider these items here.

<sup>8</sup> “Afin de m’en tenir uniquement aux liaisons facultatives [in the contexts N + A or N + past participle, NP/ES], j’ai aussi dû écarter les locutions toutes faites qui font une liaison communément considérée comme obligatoire. Une liste de ces cas comprend les expressions suivantes : [...] *Champs Élysées*, *Nations Unies*, [...] *Jeux Olympiques* [...]” (Ågren 1973: 124). [In order to consider exclusively optional liaisons, I also had to remove collocations/idiomatic phrases which, as a general rule, show an obligatory *liaison*. A list of these cases includes the following expressions: [...] *Champs Élysées*, *Nations Unies*, [...] *Jeux Olympiques* [...].]

between a prenominal adjective and a noun (AN, around 5%), 9 between a determiner and a noun (DN, around 24%) and 18 between a noun and a post-nominal adjective (NA, around 49%). As these data are data from a reading task, they are fully comparable to the reading data from the PFC. Figure 5 gives the overall picture: in 96% (611 vs. 24) of all reliable recordings, *liaison* between two adjectives is avoided, whereas it is realized in 95% (156 vs. 9) of all reliable recordings for AN. *Liaison* between D and N is realized categorically (100%). When it comes to *liaison* in NA-combinations, the picture is less clear: it is realized in about 30% (424) of the reliable recordings, and not realized in about 70% (977).

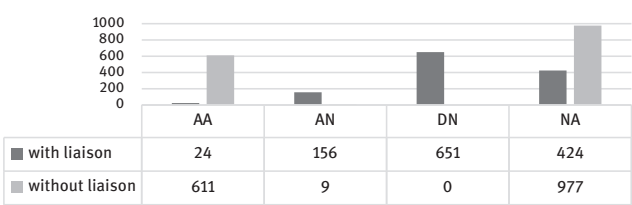


Figure 5: Overall results (*Stimmen der Schweiz* corpus) (cf. Pomino and Stark 2016).

A closer look at the single items of NA-combinations showed however an overall preference for not realizing *liaison*, except for two items, where *liaison* was realized in almost every recording (roughly, in 96.5% and 99% respectively of the reliable recordings): *Nations Unies* ‘United Nations’ and *États-Unis* ‘United States’. These two items were the only proper names in the test sentences.

### 3 Liaison as a signal of proprialization

In view of all that has been mentioned so far, it might be thought that in French we have a prenominal-postnominal asymmetry with respect to plural marking within the DP: Plural marking via *liaison*-[z] is possible and strongly preferred in the prenominal domain and strongly dispreferred (even almost impossible) on the noun or, more generally, in the postnominal DP-domain (Pomino 2012). Interestingly, there are, however, some NA-combinations where *liaison* seems to occur nearly categorically, e.g. in (2a). These examples are opposed to other NA-combinations, like the one in (2b), not only due to the presence of *liaison*, but also due to their semantics: The example in (2a) has (or can have) a non-compositional reading, whereas the one in (2b) has a compositional reading.

- (2) a. *Jeu-x Olympique-s*  
           game-PL olympic-PL  
           [ʒø-z olẽpik]  
           game-PL olympic  
           ‘Olympic Games’
- b. *idée-s autonomiste-s*  
           idea-PL autonomist-PL  
           [ide otonomist] [no *liaison* between N and A, thus no plural  
           marking]  
           idea autonomist  
           ‘autonomist ideas’

This observation can be interpreted in the following way: The maintenance of the *liaison*-[z] in expressions such as *Jeux Olympiques* is a kind of ‘frozen’ morphology signaling ‘proprialization’ (Bybee 2010). Pomino and Stark (2016) hypothesized that this “frozen” morphological element has acquired or is acquiring a new synchronic function, i.e. *proper-name marking* or at least the marking of a clearly non-compositional reading (cf. Ågren 1973 who reported that *liaison* is obligatory in certain frequent phrases which are often proper names, e.g. *Champs Élysées*). This is in line with other studies that have observed a tendency in languages to distinguish proper names also on their form-side from common nouns by using any formal possibility available (e.g. Nübling 2005: 28; see also Matushansky 2008: 605–606 for English). In the case of French, it is the preservation of *liaison*-[z] in NA-combinations which has already disappeared in compositional, free combinations of a common noun with a postnominal adjective.

Following the useful distinction made by Vandelanotte and Willemse (2002) (see also von Heusinger 2010, cf. Pomino and Stark 2016, Schlücker and Ackermann 2017: 310–311) between *proprial lemmata* or *proper nouns* on the one hand and *proper names* as a specific syntactic category on the other, the realized *liaison* consonant in NA-combinations could be seen as the morphological exponent of a ‘proper name’ feature of lexical units in contemporary French, signalling formal properties such as close apposition of its components, absence of otherwise obligatory determiners in many languages in argument position, some specific movement features (cf. e.g. Longobardi 1994 for Romance) and transnumerality. Proprial lemmata comprise “words that function prototypically as proper names” (Vandelanotte and Willemse 2002: 9), like *Napoleon*, *Kafka* or *Maria*. Typically, proprial lemmata are characterized by the *gradual loss of internal and external (case) inflection* (cf. e.g. Leroy 2004, Nübling 2005, 2012, Fuss 2011, Ackermann 2018), i.e. they have a

special form, usually a morphologically deviant inflectional behavior etc. making them easily recognizable and distinguishable from fully compositional units. Syntactically, they belong to the category N°. Apart from our study of 2016, only Bosredon (2011) worked on proper names in Romance, to our knowledge, and stated, that, on the semantic side, name-like expressions turn from a descriptive argument into a rigid designator, which is the main reason why languages try to distinguish proper names as well as proprial lemmata from compositional units (cf. Nübling 1998, 2005, Schlücker and Ackermann 2017).

Based on the observations made so far, we put forward the following Hypothesis I:

Hypothesis I: *Liaison*[-z] (and other latent consonants) in NA-combinations are acquiring the new synchronic function to mark proper names (or, at least, NA-combinations with non-compositional readings).

If it is true that *liaison*[-z] in NA-combinations is acquiring a new synchronic function, we expect at least two things. First, proper-name marking via *liaison*[-z] should be productive and thus applicable to “new” or “invented” proper names. In this context, the following metalinguistic comment about the example *les maladies anglaises* ‘the English diseases’ (depressions, suicidal tendencies) from a participant in our first query is especially interesting, since she states that she would realize *liaison* only if *maladies anglaises* could be used as a proper name:

[...] je ferais la liaison s’il était avéré que certaines maladies, évoquées habituellement par périphrase, sont attribuées à tort ou à raison à l’Angleterre (maladies sexuellement transmissibles); ou encore, dans un sens ironique, pour évoquer les “maladies anglaises” comme un comportement particulier (par ex. ne pas aller au travail).

[‘I would realize the *liaison* if it was the case that certain diseases, usually denoted by a periphrasis, are attributed, rightly or wrongly, to England (sexually transmitted diseases), or to evoke, in an ironic way, the “English diseases” as a particular way of behaving (e.g. not going to work).’]

Second, other *liaison* consonants (i.e. [t], [n], [ʁ] or [p]) should also appear (productively) as proper-name markers, as for instance [t] in *Mont Aigu* [mɔ̃tegy] (not \*[mɔ̃egy]) (a mountain near Fontainebleau, to the south of Paris).<sup>9</sup> This last point is very interesting, because, in the literature, *liaison* between a noun and a postnominal adjective is considered possible only in plural DPs. With singular nouns, *liaison* is classified as impossible or “forbidden” by most researchers (see Delattre 1955 among many others). If we were to

<sup>9</sup> We would like to thank Christoph Schwarze, Konstanz, for pointing out this example to us.

find *liaison* between a singular noun with a latent consonant [t], [n], [ʁ] or [p] and a postnominal adjective only in proper-name-like expressions (but not in others), this would be a strong argument in favor of Hypothesis I, namely that *liaison* in this context has gained a new function.

If these two expectations are supported by empirical evidence, the categorical status of a NA-combination being either a proper name or an ordinary noun phrase would be an additional, up to now unknown factor that impinges on *liaison* in French. Moreover, if *liaison*-[z] in French NA-combinations turns out to be an actual proper name-marking device, this would mean that, contrary to proper name-marking in Germanic languages, where proper names show *less* inflectional material or *less* inflectional allomorphy (e.g. Nübling 2005, Fuss 2011), proper-name-like NA-combinations in French show *more* (frozen) internal inflectional marking, at least in cases of *liaison* with [z].

If the two expectations based on H 1 are not supported, however, by empirical evidence, an explanation not necessarily implying the expectation of synchronic productivity is at issue. One possible explanation is *univerbation* understood in the sense of Jacobs (2005: 106): “[unter Univerbierung] verstehe ich [...] eine diachrone Entwicklung, bei der [...] eine syntaktische Konstituentengrenze zwischen direkt adjazenten Ausdrücken eliminiert oder unter die Grenze des Einflußbereichs syntaktischer Prozesse und Gesetze verschoben wird”.<sup>10</sup> Syntactically, the result of univerbation is thus a single lexical category, in our context N° (of the category proper name, *univerbation* would thus be equivalent in our case to *proprialization*). Based on this definition, we put forward the following Hypothesis II:

Hypothesis II: The preservation of [z] in the NA-combinations at issue is the result of the diachronic process of univerbation due to which two words/lexical units are reanalyzed as a new single word/lexical unit favored by factors such as adjacency, a proper name reading and *liaison* which blurs word boundaries.

With respect to productivity, our prediction based on Hypothesis II is as follows: If we are dealing with a (completed) diachronic process, only those NA-combinations which allowed *liaison* at the relevant point in time may have a *liaison* consonant in their univerbated form. That is, new NA-combinations, even though they are used as proper names, do not display a *liaison* consonant, because *liaison* in this context is actually no longer possible.

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<sup>10</sup> ‘[by univerbation] I understand a diachronic development in which a syntactic boundary between directly adjacent elements is either eliminated or removed from the sphere of influence of syntactic processes and laws’.

In order to verify whether or not one of our two hypotheses is valid, we conducted two pilot studies, which we will present in Section 4.1 and Section 4.2 respectively.

## 4 Testing our hypotheses: two pilot studies

### 4.1 Pilot study I: methodology, participants and test instruments

In our first pilot study, we asked 18 native speakers of French (13 women and 5 men between 24 and 59 years old from different French-speaking regions – 5 Switzerland, 12 metropolitan France and 1 Canada (Quebec); 5 bilingual speakers)<sup>11</sup> to read aloud 30 sentences that contained 37 NA-combinations where *liaison* was potentially possible. We are well aware that the reading task may trigger a spelling pronunciation and lead to higher *liaison*-rates than spontaneous language use. Naturalistic data, however, do not offer sufficient comparable examples for a fine-grained quantitative and qualitative study like the one we need in order to test our hypothesis, especially as we want to test the productivity of *liaison* and therefore have to create “new” proper names.

We tested the most frequent latent consonants [z] (N=14), [t] (N=10) and [n] (N=6) as well as the less frequent latent consonant [ʁ] (N=7). The NA-combinations were presented in contexts where they could be interpreted as proper names (N=20) (cf. Table 2) or as non name-like NA-combinations (N=17). This allows us to see whether one and the same linear NA-combination shows different results with respect to *liaison* depending on the type of NA-combination at issue (especially proper name or not).<sup>12</sup> The examples in (3) illustrate the test items for the *liaison* consonant [z]: If Hypothesis I turns out to prove correct, we expect higher *liaison*-rates in cases like (3a) than in cases like (3b). If, instead, Hypothesis II turns out to prove correct, we do not necessarily expect higher *liaison*-rates since *liaison* is no longer productive in NA-combinations. Table 2 gives an overview of the test items.

<sup>11</sup> We realize that this is not a representative sample, which will be set up in the systematic study we envisage now on the basis of the results of our pilot study.

<sup>12</sup> For the sake of simplicity, we have not distinguished in our analysis of the data between ordinary syntactic phrases and compound nouns. In future work, where we will enlarge our query, this will be done.

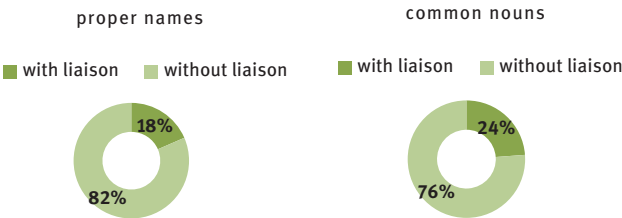
- (3) a. *Depuis près d’un demi-siècle, l’association **Mains Unies** propose chaque été une formule de vacances alternatives.* (proper name)  
‘Since around fifty years, the *Mains Unies* association has offered each summer a package of alternative holidays.’
- b. *Pour sa présentation sur les concepts de travail d’équipe, Pierre cherche encore une photo avec un groupe de personnes avec les **mains unies**.* (common noun)  
‘For his presentation on the concepts of team work, Peter is still looking for a picture with a group of people joining their hands.’

**Table 2:** Items that were tested in a context forcing a proper name reading.

Item		Context		<i>liaison</i> consonant	Number
		PN	CN		
1	<i>bouclier arverne</i>	+	+	ʁ	SG
2	<i>chien enragé</i>	+	+	n	SG
3	<i>chien errant</i>	+	+	n	SG
4	<i>courrier urgent</i>	+	+	ʁ	SG
5	<i>étudiant intelligent</i>	+	+	t	SG
6	<i>informations honnêtes</i>	+	+	z	PL
7	<i>Léman Express</i>	+	–	n	SG
8	<i>mains unies</i>	+	+	z	PL
9	<i>monsieur indestructible (2x)</i>	+	–	ʁ	SG
10	<i>monsieur Optimiste</i>	+	–	ʁ	SG
11	<i>Mont Aigu</i>	+	–	t	SG
12	<i>Mont Aimé (3x)</i>	+	–	t	SG
13	<i>Mont Août</i>	+	–	t	SG
14	<i>portes ouvertes</i>	+	+	z	PL
15	<i>saveurs indiennes</i>	+	+	z	PL
16	<i>soldat espagnol</i>	+	+	t	SG

Only four items might trigger *liaison* with “plural” [z], i.e. items 6, 8, 14 and 15. All the other items are singular, i.e. offer a context that disfavors *liaison*. Nevertheless, if *liaison* in general (and not only *liaison* with [z]) is re-functionalized as a marker of proper names, we expect higher *liaison* rates also in these cases.

As shown in Figure 6, the mean *liaison* rates of all instances of *liaison* are slightly lower in the case of proper names than in the case of common nouns. This contradicts, at first glance, our Hypothesis I stated above as well as the basic assumptions of Section 2.



**Figure 6:** Mean *liaison* rates in proper-name-like NA-combinations vs. common-noun-like NA-combinations.

Yet, in those cases where the NA-combination at issue classifies as common noun + adjective, we find *liaison* only with “plural” [z] (cf. Table 3). This is in line with what has been stated in the literature: /z/ (the only consonant that can be associated with number) is the most frequent *liaison* consonant, and there is no *liaison* in singular NA-combinations. Based on our previous studies (cf. also fn. 6), we would however expect a lower *liaison* rate in the case of ordinary syntactic phrases. In contrast to our corpus-based findings in Pomino and Stark (2016), the tendency for the non-realization of [z] in the postnominal context is thus much less clear.

Things seem to be different with proper-name-like NA-combinations (cf. Table 4): *Liaison* rates with “plural” [z] are slightly higher than with the ‘common nouns’, but the most striking fact is that we found indeed some cases of realized *liaison* in singular NA-combinations that were interpretable as proper names (e.g. *liaison*-[t] in *Mont Aimé*, *liaison*-[n] in *Léman Express*). Recall that *liaison* between a singular noun and a postnominal adjective is considered as impossible in standard literature and, as shown in Table 3 below, it is avoided in cases of ‘common noun + adjective’ readings. The appearance of *liaison* in this “forbidden” context can be seen as a hint that there is a new kind of trigger for *liaison* emerging: proper name-marking.

**Table 3:** *Liaison* rates with common nouns (NA-combinations).

Type of NA-combination	N =	Mean <i>liaison</i> rate	<i>Liaison</i> consonant <sup>13</sup>	Number	<i>Liaison</i> rate per consonant	
Common nouns + adjective	17	24% (73/306)	n (N = 2)	SG	0/36	0%
			ʁ (N = 2)	SG	0/36	0%
			t (N = 3)	SG	0/54	0%
			z (N = 10)	PL	73/180	40.55%

**13** In a future more systematic study, we will harmonize the number of tokens for the different *liaison* consonants.



Table 4: *Liaison* rates with proper names (NA-combinations).

Type of NA-combination	N =	Mean <i>liaison</i> rate	<i>Liaison</i> consonant	Number	<i>Liaison</i> rate per consonant
Proper names	20	18.5% (64/346)	n (N = 4)	SG	3/72 4.17%
			ʁ (N = 5)	SG	0/90 0%
			t (N = 7)	SG	21/112 18.75%
			z (N = 4)	PL	40/72 55.55%

As mentioned above, we tested the most frequent latent consonants [z], [n] and [t] as well as the less frequent latent consonant [ʁ] (cf. Durand and Lyche’s 2008 ranking: [z] > [n] > [t] > [ʁ] > [p]; cf. also Green and Hintze 2001: 34). For combinations with ‘common noun + adjective’ readings, this frequency ranking is borne out in that [z] is also the most frequent consonant in our data. Nothing can be said about the other consonants, since in singular NA-combinations where they might appear, *liaison* is strictly avoided. For NA-combinations that are interpreted as proper names, [z] is again the most frequent latent consonant. Yet, with respect to the other *liaison* consonants, we can tentatively conclude that [t] and [n] are inverted since, opposed to the standard ranking, we found more *liaison* with [t] in singular NA-combinations than with [n] (see however Section 4.2).

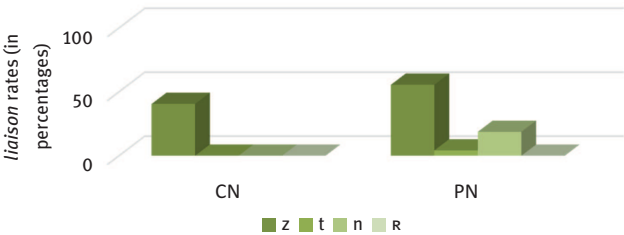


Figure 7: Realized *liaison* for each *liaison* consonant (in percentages).

Figure 7 further shows that *liaison* in plural NA-combinations, i.e. [z]-*liaison*, is by far the most frequent type of *liaison* in our data. *Liaison* in singular NA-combinations, i.e. *liaison* with [t], [n] and [ʁ], is absent in our data for the ‘common noun + adjective’ reading, but attested for NA-combinations with a proper name reading.

In plural NA-combinations where [z]-*liaison* might appear, collocational frequency seems to play an important role in the application of *liaison*. Table 5

below shows that the percentage of *liaison* with [z] in NA-combinations increases in line with the frequency of the respective NA combination (see Bybee 2001 for frequency effects on French *liaison*). It seems as if the “status” of the NA-combination as proper name or syntactic phrase is less important in more frequent combinations. That is, in the not so frequent combination *informations honnêtes* (and *mains unies*), there is a neat difference between proper name readings (22.22% of *liaison*) and ordinary syntactic phrases (8.33%), whereas this difference nearly disappears in *saveurs indiennes* and in the highly frequent combination *portes ouvertes*.

Table 5: “Frequency effects” with *liaison*-[z].

Token	Google score <sup>14</sup>	Type of NA		Liaison rates	
<i>informations honnêtes</i>	6.910	Syntactic phrase	(N = 2)	3/36	8.33%
		Proper name	(N = 1)	4/18	22.22%
<i>mains unies</i>	97.800	Syntactic phrase	(N = 3)	32/54	59.26%
		Proper name	(N = 1)	15/18	83.33%
<i>saveurs indiennes</i>	124.000	Syntactic phrase	(N = 1)	11/18	61.11%
		Proper name	(N = 1)	10/18	55.55%
<i>portes ouvertes</i>	16.300.000	Syntactic phrase	(N = 1)	10/18	55.55%
		Proper name	(N = 2)	24/36	66.66%

In Section 3, we formulated two expectations which were linked to the hypothesis that *liaison* is acquiring the new synchronic function of marking proper names (H I):

- Proper-name marking via *liaison*-[z] should be productive and thus applicable to “new” or “invented” proper names.
- Other *liaison* consonants (i.e. [t], [n], [ʁ] or [p]) should appear (productively) as proper-name markers.

With respect to the first expectation, we have to conclude that it is only partially fulfilled as, in the case of *liaison*-[z] we did not find a clear tendency to mark only proper name readings with [z]. The reasons still have to be analyzed in

14 Google search: 28.08.2017. We are well aware that these scores, which are based on Google’s frequency, are only rough indications since they may vary depending on the country/computer from which the search was carried out.

more detail. In contrast to this, our second expectation is apparently fulfilled: The *liaison* rate with consonants other than [z] (more precisely, with the *liaison* consonants [t] and [n]) is *only* attested in the case of proper name readings, not with “ordinary” syntactic phrases. This finding is particularly relevant as *liaison* between a singular noun and a postnominal adjective is considered to be impossible in contemporary standard French. Admittedly, the realization percentages for these *liaison* consonants are not very high, but *liaison* seems at least possible with proper-name-like expressions, whereas it is avoided in ordinary syntactic phrases. The low percentage may be due to the fact that proper-name marking via *liaison* is a very recent pattern whose grammaticalization is only just starting. With a second pilot study, presented in the following section, we wanted to check whether this result is systematic or only a coincidence.

## 4.2 Pilot study II

In our second pilot study, we asked 28 native speakers of French (17 women and 11 men) to read aloud 30 sentences – 10 sentences for each *liaison* consonant /n/, /t/ and /r/ – that contain 30 singular NA-combinations. Nearly all the respective NA-combinations were given in a linguistic context forcing either a proper name reading (N=15) or a compositional reading typical of ordinary syntactic phrases (N=15) (cf. examples (4a) vs. (4b) and Table 6). That is, most NA-combinations appeared twice, as a proper name and as an ordinary syntactic phrase.

- (4) a. *J'ai le certificat bio d'un paysan étranger.* (common noun)  
       'I got the organic certificate from a foreign farmer.'  
       b. *Au « Paysan Étranger » on mange vraiment très bien.* (proper name)  
       'At the “Paysan Étranger, one eats really very well.'

In contrast to our first pilot study, we tested only singular NA-combinations, since this is the context where we can check whether or not *liaison* with [t], [n] and [ʁ] is (productively) used as a proper-name marker. For each possible *liaison* consonant, we tested 10 instances (5 as PN and 5 as CN, except for [t], where we have 4 PN and 6 CN). Some of these items were already included in our first pilot study, but the majority of NA-combinations were new. We tried to test frequent nouns (e.g. *pont*) and adjectives (e.g. *ancien*) as well as less frequent ones (e.g. *nain*, *audacieux*) in order to gain more insight into the relevance of frequency of the constituents for *liaison*. Additionally, we included more and less frequent combinations (e.g. *courrier urgent* vs. *nain intoxiqué*).

**Table 6:** Items that were tested in a context forcing a proper name reading.

Item		Context		liaison consonant	Number
		PN	CN		
1	<i>matin exotique</i>	+	+	n	SG
2	<i>nain intoxiqué</i>	+	+	n	SG
3	<i>son indien</i>	+	+	n	SG
4	<i>bonbon appétissant</i>	+	+	n	SG
5	<i>paysan étranger</i>	+	+	n	SG
6	<i>patient anglais</i>	+	+	t	SG
7	<i>assaut audacieux</i>	+	+	t	SG
8	<i>savant africain</i>	–	+	t	SG
9	<i>chocolat alimentaire</i>	–	+	t	SG
10	<i>mont immense</i>	–	+	t	SG
11	<i>pont ancien</i>	+	+	t	SG
12	<i>Mont Aimé</i>	+	–	t	SG
13	<i>courrier urgent</i>	+	+	ʁ	SG
14	<i>bouclier arverne</i>	+	+	ʁ	SG
15	<i>métier anodin</i>	–	+	ʁ	SG
16	<i>soulier exclusif</i>	–	+	ʁ	SG
17	<i>soulier explosif</i>	+	–	ʁ	SG
18	<i>métier assuré</i>	+	–	ʁ	SG
19	<i>conseiller aulique</i>	+	+	ʁ	SG

If our hypothesis that *liaison* is beginning to receive a new synchronic function is correct, we expect a higher *liaison* rate in the case of (4b) than in the case of (4a). However, we could not find any instance of realized *liaison*, whether for common noun or for proper name readings. This means that our second expectation – other *liaison* consonants (i.e. [t], [n], [ʁ] or [p]) appear productively as proper-name markers – is not fulfilled. What is more, in pilot study I *liaison* rates for *Mont Aimé* were relatively high (25%), but there is not a single instance of *liaison* in the second pilot study with this item. In sum, the results of the second pilot study indicate that our first findings were not sufficiently systematic.

## 5 Discussion

The results of the pilot studies conducted (production data, reading tasks) make it impossible to maintain Hypothesis I according to which *liaison* has achieved the new synchronic function of marking proper names. We did find some

surprising *liaison* realizations in singular NA-combinations which might have been triggered by a ‘proper-name reading’ of the test items in the first of our two new pilot studies. Yet, the first pilot study showed that the productivity of *liaison*-[z] is not as high as expected and that for the singular NA-combinations, a lexical trigger might have been at issue (*mont*, with *liaison* [t] in proper-name-like expressions). Furthermore, other *liaison* consonants were not realized in our ‘invented’ proper names in the second study, i.e. they are not productive at all. As pointed out by an anonymous reviewer, one possible explanation for the fact that *liaison* was not re-functionalized as a marker of proper names may be that *liaison* is a phrase-medial process that applies only to a restricted number of combinations, i.e. the first element needs to end in a latent consonant and the second element must begin with a vowel. In other words, *liaison* might be too restrictive to evolve to becoming a marker for proper names since not all proper names could be marked by this means. Nevertheless, in previous studies and the first pilot study, we remarked a strong tendency, that still has to be accounted for, for *liaison* to appear in proper names. This led us to consider a second hypothesis (repeated here for convenience) based on which we do not expect a productive element, but nevertheless an indirect ‘proper name effect’:

Hypothesis II: The preservation of [z] in the NA-combinations at issue is the result of the diachronic process of univerbation due to which two words/lexical units are reanalyzed as a new single word/lexical unit favored by the factors of adjacency, proper-name readings and *liaison* which blurs word boundaries.

As stated before, univerbation is understood as a (syntactic) diachronic process which combines two (or more) adjacent words/lexical units into a new word/lexical unit. Recall the distinction between *proprial lemma* or *proper noun* on the one hand (lexicon) and *proper name* on the other (syntax), introduced in Section 2.3. Sandhi phenomena such as *liaison*, which blur word boundaries as well as a non-compositional semantics of the NA-combinations at issue are very likely to be factors that favor univerbation. We would even argue that the reading of proper names constitutes the key condition leading to univerbation of the NA-combination including the *liaison* consonant.<sup>15</sup> Frequency of co-occurrence can be seen, in contrast, as an epiphenomenon of univerbation. That is, once a combination has been (diachronically) univerbated (=reanalysis of XP to X<sup>0</sup>, concretely from NP to N<sup>0</sup>), the co-occurrence of the two combined elements

<sup>15</sup> Note that NA-combinations like *Jeux Olympiques* are not just compound words: First, there are no native NA-compounds in French (cf. e.g. Villoing 2012: 44–49), and, second, if there were any, we would not expect agreement between the two constituents of a compound word.

increases automatically in synchrony. Univerbation also includes the loss of the original morphological and/or syntactic structure of the elements involved.

Univerbated forms may still for some time maintain aspects of (or co-exist to a certain extent with) the original non-univerbated word sequences, leading in synchrony to contradictory data such as examples (5) and (6) below with respect to agreement. In (5), *Jeux Olympiques* triggers plural agreement on the verb and on other DP-external elements.

- (5) *Les Jeux Olympiques sont des compétitions athlétiques.*  
 ‘The Olympic Games are athletic competitions.’

*Jeux Olympiques* can, however, be combined with the indefinite quantifier or distributive determiner *chaque* ‘each’, which due to its distributional meaning is incompatible with a plural noun, cf. e.g. *Chaque étudiant/\*étudiants a/\*ont lu un livre* ‘Each student/\*students has/\*have read a book’. This shows that *Jeux Olympiques*, even though the original plural is perceptible in the form via *liaison*, is conceived as a single entity on the semantic level in (6).<sup>16</sup> Once *Jeux Olympiques* has been univerbated it may thus trigger singular agreement on the verb and the predicative adjective, because the former plural marker [z] is now part of a univerbated form and no longer analyzable as a plural marker on the noun.

- (6) a. *L'autre langue utilisée à chaque Jeux Olympiques est la langue du pays d'accueil.*<sup>17</sup>  
 ‘The other language used during each Olympic Games is the language of the host country.’  
 b. *Depuis, le relais et l'allumage de la flamme ont eu lieu à chaque Jeux olympiques.*<sup>18</sup>  
 ‘Since then, the relay and the lighting of the flame have taken place at each Olympic Games.’  
 c. *A chaque jeux olympiques, le même rituel.*<sup>19</sup>  
 ‘At each Olympic Games the same ritual.’

<sup>16</sup> As pointed out by an anonymous reviewer, the written examples in (6) give no hint as to whether or not *Jeux Olympiques* is realized with *liaison*.

<sup>17</sup> Found in: [http://oer2go.org/mods/fr-wikipedia\\_for\\_schools/wp/o/Olympic\\_Games.htm](http://oer2go.org/mods/fr-wikipedia_for_schools/wp/o/Olympic_Games.htm) (11.03.2019).

<sup>18</sup> Found in: [http://fr.wikipedia.org/wiki/Flamme\\_olympique](http://fr.wikipedia.org/wiki/Flamme_olympique) (11.03.2019).

<sup>19</sup> Found in: <https://blog.francetvinfo.fr/fais-pas-com-papa/2018/02/11/jo-dhiver-2018-la-com-munication-des-athletes-sous-haute-surveillance.html> (11.03.2019).

This permits in our view the assumption of a reanalysis of the proper name *Jeux Olympiques* (NA) as a proper noun (N°), facilitated by the sandhi phenomenon of *liaison*, also existing as internal sandhi (cf. *dés[z]orienté*, ‘disoriented’, and the like). In sum, we assume that there is proper name marking via *liaison* in French, not (yet) as a synchronically productive process (against our Hypothesis I), but as the result of the diachronic process of univerbation (Hypothesis II).

## 6 Conclusion

Many studies have shown that the realization of *liaison*-[z] in NA-combinations is becoming very rare in naturalistic data – except for contexts which allow a proper-name reading of the respective NA-combination. This observation leads to at least two, at first sight contradictory, hypotheses: (I) French *liaison* is acquiring a new synchronic function, which consists in marking proper-names (proprialization). We expect a productive process that manifests itself also in new, i.e. invented proper names. (II) The preservation of *liaison* in the NA-combinations at issue is the result of the diachronic process of univerbation. We do not expect a productive element, but nevertheless an indirect ‘proper name effect’ as one leading factor for univerbation to take place in French (semantics). We tested both these hypotheses in an experimental setting: We did find some surprising *liaison* realizations in singular NA-combinations which might have been triggered by a ‘proper-name reading’ of the test items in our first study. Yet, a second study showed that the productivity of *liaison*-[z] is not as high as expected and, additionally, that other *liaison* consonants were not used in our ‘invented’ proper names, i.e. they are not productive at all. Thus, Hypothesis I is not or only partially borne out. This led us to consider Hypothesis II based on which we do not expect a productive element: univerbation. Univerbation can be understood as reanalysis of the proper name *Jeux Olympiques* (NA-combination) as a proper noun (N°), facilitated by the following three factors: (i) The boundaries between the two words/lexical units are blurred due to the *sandhi* phenomenon of *liaison*, (ii) the respective noun and adjective frequently appear adjacent to one another, and (iii) the combinations have a non-compositional semantics. In sum, we assume that there is proper name marking via *liaison* in French, not (yet) as a synchronically productive process (against our Hypothesis I), but as the result of the diachronic process of univerbation (Hypothesis II).

In order to avoid over-interpretation of our data, we have to keep in mind that *liaison* in French is a multi-factorial phenomenon. In our discussion, syntactic

context (AN- vs. NA-combinations, singular vs. plural nominals), the segmental nature of the *liaison* consonant, its function as a potential exponent of grammatical features, and frequency effects (of the whole collocation) have been shown to be at stake, without, however, a multifactorial analysis having been done for the moment. Contrary to our findings in Pomino and Stark (2016), our experimental data suggest that *liaison* in plural NA-combinations, considered to be optional, but vanishingly rare in Modern French, might also partially be triggered by mere frequency of the respective collocation. This is in line with general observations on linguistic change: Frequent items resist change longer than less frequent ones (cf. e.g. Bybee 2001: 347). In contrast to this generalization, we discovered instances of impossible, “forbidden” *liaison* in singular NA-combinations, all of which are to be interpreted as proper names. This is surprising, as the loss of *liaison* in this context is rather old (since at least the middle of the last century, cf. Delattre 1955) and cannot be explained by maintenance of an older variant. Of course, all cases of *liaison* with proper-name-like singular NA-combinations with [t] are found on the item *mont* ‘mountain’, except in one case for *soldat espagnol* ‘Spanish soldier’; all cases of *liaison* with proper-name singular NA-combinations with [n] are found with *Léman Express*, which looks at first glance like a lexeme-specific phenomenon rather than a slowly spreading rule. In a diachronic perspective, however, lexical specificity is in line with diachronic observations; innovations usually start out in highly specific contexts and spread only slowly by analogical extension to structurally similar ones (cf. Lass 1993: 180 on the exception-less Neogrammarian sound laws, which are exception-less only at the end of the process of change). Of course, our data base is too small yet to decide whether or not we are facing an actual language change in the sense of *exaptation* (cf. Lass 1990), but we hope to have shown that there is an interest in studying *liaison* in French NA-combinations as a potential proper name-marker, both in experimental studies and further extensive corpus analyses.

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## Abbreviations

DEM	demonstrative
DET	determiner
PL	plural

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